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INTERNATIONAL PRELIMINARY EXAMINATION REPORT  
(PCT Article 36 and Rule 70)

10/525609

Applicant's or agent's file reference 03K100/PCT		<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. <b>PCT/KR2003/001587</b>	International filing date (day/month/year) <b>07 AUGUST 2003 (07.08.2003)</b>	Priority date (day/month/year) 05 SEPTEMBER 2002 (05.09.2002)	
International Patent Classification (IPC) or national classification and IPC <b>IPC7 H04Q 7/22</b>			
Applicant <b>SK TELECOM CO., LTD. et al</b>			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets, including this cover sheet.  
☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  
 These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:
  - ☒ Basis of the report
  - ☐ Priority
  - ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - ☐ Lack of unity of invention
  - ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - ☐ Certain documents cited
  - ☐ Certain defects in the international application
  - ☐ Certain observations on the international application

Date of submission of the demand <b>31 MARCH 2004 (31.03.2004)</b>	Date of completion of this report 29 NOVEMBER 2004 (29.11.2004)
Name and mailing address of the IPEA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer JEONG, Hae Kon Telephone No. 82-42-481-5986 

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/KR2003/001587

## I. Basis of the report

### 1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed
- ☐ the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the claims:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement) under Article 19  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the drawings:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

### 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

### 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

### 4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets \_\_\_\_\_

### 5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed." and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION

International application No.

PCT/KR2003/001587

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims 1-13	YES
	Claims	NO
Inventive step (IS)	Claims 1-13	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-13	YES
	Claims	NO

### 2. Citations and explanations (Rule 70.7)

Documents cited in the International Search Report:

D1 : KR2000-0000244 A (15.JAN.2000)

D2 : KR2001-0108937 A (08.DEC.2001)

D3 : KR2000-0030035 A (05.JUN.2000)

D4 : KR2000-0055316 A (05.SEP.2000)

D5 : US5926537 A (20.JUL.1999)

D6 : JP2000-106685 A2 (11.APR.2000)

D7 : JP2000-050347 A2 (18.FEB.2000)

D8 : WO2000-49793 A1 (24.AUG.2000)

D9 : KR2002-0039501 A (27.MAY.2002)

Claims 1-13 of the present invention relate to a method of managing a trunk to provide a ring-back sound in a subscriber-based ring-back sound service, the ring-back sound service method including the steps of a) a home location register providing first information indicating whether a ring-back tone preset in the home location register is substituted and second information for performing routing to intelligent peripheral means to a corresponding terminating mobile switching center when a location of a terminating subscriber is registered; b) the terminating mobile switching center providing a ring-back tone to an arbitrary originator or requesting a connection of a trunk call from the intelligent peripheral means according to the first and second information, when the terminating mobile switching center recognizes a call connection request transmitted from the arbitrary originator to the terminating subscriber; c) the intelligent peripheral means searching for a ring-back sound preset with respect to the terminating subscriber after connecting the trunk call in response to the trunk call connection request, and providing the searched ring-back sound to the originator instead of the ring-back tone through the trunk-connected terminating mobile switching center, the trunk management method comprises the steps of: The terminating mobile switching center requesting a release of the connected trunk call from the intelligent peripheral means when an answer of the terminating subscriber is recognized or when a first predetermined period of time has elapsed from a time when it is recognized that the searched ring-back sound is provided to the originator; and The intelligent peripheral means requesting a release of the connected trunk call from the terminating mobile switching center when a second predetermined period of time has elapsed from a time when the ring-back sound begins to be provided.

D1-D9 do not include the features of claims 1-13.

Hence, the subject-matter of Claims 1-13 is novel and inventive according to PCT Article 33(2) and (3).

The industrial applicability of Claims 1-13 is self-evident in the sense of Article 33(4) PCT.

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